Available online at www.sciencedirect.com
SCIENCE DIRECT®
ELSEVIER
Nuclear Instruments and Methods in Physics Research B 225 (2004) 632–639
NIM B
Beam Interactions with Materials & Atoms
www.elsevier.com/locate/nimb

Author index

Abromeit, C. and A.R. Kuznetsov, Molecular dynamics simulation of a swift ion track in NiAl 225 (2004) 97
Alegaonkar, P.S. and V.N. Bhoraskar, Characterization of polyimide irradiated in silver solution with a pulsed electron beam 225 (2004) 267
Andersen, H.H., G. Schiwietz and H.-E. Mahnke, Editorial 225 (2004) 1
Appleby, P.G. and G.T. Piliposian, Efficiency corrections for variable sample height in well-type germanium gamma detectors 225 (2004) 423
Ariyasinghe, W.M., C. Goains, D. Powers, T. Wijeratne and P. Palihawadana, Total electron scattering cross sections of He, Ne and Ar at intermediate electron energies 225 (2004) 191
Aslam, see Khan, R.F.H. 225 (2004) 528
Avasthi, D.K., see Chaudhary, Y.S. 225 (2004) 291
Ayyub, P., see Ghosh, S. 225 (2004) 310

Bačáková, L., see Ročková-Hlaváčková, K. 225 (2004) 275
Baghabra Al-Amoudi, O.S., see Naqvi, A.A. 225 (2004) 331
Banerjee, D., see Ghosh, S. 225 (2004) 310
Barradas, N.P., Double scattering in grazing angle Rutherford backscattering spectra 225 (2004) 318
Barué, C., see Jardin, P. 225 (2004) 374
Basa, D.K., see Vijayan, V. 225 (2004) 353
Beckmann, F., see Thurner, P. 225 (2004) 599
Belhout, A., see Damache, S. 225 (2004) 449
Beling, C.D., see Weng, H.M. 225 (2004) 397
Benyagoub, A., Investigations by X-ray diffraction of swift heavy ion induced effects in inorganic materials 225 (2004) 88
Bercu, B., I. Enculescu and R. Spohr, Copper tubes prepared by electroless deposition in ion track templates 225 (2004) 497
Bhattacharya, R., see Ghosh, S. 225 (2004) 310
Bhattacharyya, S.R., see Czerski, K. 225 (2004) 72
Bhoraskar, V.N., see Alegaonkar, P.S. 225 (2004) 267
Bolmaro, R.E., see Salvatierra, L.M. 225 (2004) 297
Bolorizadeh, M.A., S. Ruffell, I.V. Mitchell and R. Gwilliam, Quantitative depth profiling of ultra-shallow phosphorus implants in silicon using time-of-flight secondary ion mass spectrometry and the nuclear reaction $^{31}P(\alpha,p_0)^{34}S$ 225 (2004) 345
Bolse, W., see Schattat, B. 225 (2004) 105
Boreham, D.R., see Khan, R.F.H. 225 (2004) 528
Bøtter-Jensen, L., see Poolton, N.R.J. 225 (2004) 590
Bouneau, S., S. Della-Negra, J. Depauw, D. Jacquet, Y. Le Beyec, J.P. Mouffron, A. Novikov and M. Pautrat, Heavy gold cluster beams production and identification 225 (2004) 579
Braga, C.F., E.C. Teixeira, M.L. Yoneama and J.F. Dias, Study of the elemental composition of aerosols in the Candiota region of Brazil using the PIXE technique 225 (2004) 561
Bundesmann, J., see Stolterfoht, N. 225 (2004) 169

Cai, X., D. Yu, R. Lu, Z. Cao, W. Yang, C. Shao, X. Chen and X. Ma, Binding energy enhancement in the isocharge sequence of ions in collisions with Ne 225 (2004) 185
Canet, C., see Jardin, P. 225 (2004) 374
Cao, Z., see Cai, X. 225 (2004) 185
Celauro, C.A., see Salvatierra, L.M. 225 (2004) 297

doi:10.1016/S0168-583X(04)01005-5

Celiktas, C. and S. Selvi, Erratum to "Improvement of electron scattering and transmission spectra on ^{204}Tl isotope" [Nucl. Instr. and Meth. B 222 (1–2) (2004) 301–306] 225 (2004) 628
Cerruti, C., see D'Orléans, C. 225 (2004) 154
Chaudhary, Y.S., S.A. Khan, R. Shrivastav, V.R. Satsangi, S. Prakash, D.K. Avasthi and S. Dass, A study on 170 MeV Au^{13+} irradiation induced modifications in structural and photoelectrochemical behavior of nanostructured CuO thin films 225 (2004) 291
Chelyadinskii, A.R., see Jadan, M. 225 (2004) 516
Chen, F., see Wang, K.-M. 225 (2004) 503
Chen, X., see Cai, X. 225 (2004) 185
Cheung, C.K., see Weng, H.M. 225 (2004) 397
Cho, G., see Kim, Y.K. 225 (2004) 392
Cohen, C. and D. Dauvergne, High energy ion channeling. Principles and typical applications 225 (2004) 40
Colligon, J.S., see Kim, J.-K. 225 (2004) 509
Cornell, J., see Jardin, P. 225 (2004) 374
Cue, N., see Wang, K.-M. 225 (2004) 503
Czerski, K., see Schiwietz, G. 225 (2004) 4
Czerski, K., G. Schiwietz, M. Roth, F. Staufenbiel, P. Grande and S.R. Bhattacharyya, Non-equilibrium emission of secondary ions from BeO films sputtered by swift gold ions 225 (2004) 72

da Silveira, E.F., see Jalowy, T. 225 (2004) 78
Damache, S., S. Ouichaoui, A. Belhout, A. Medouni and I. Toumert, Stopping of 236 keV – 3.019 MeV protons in mylar and polypropylene films 225 (2004) 449
Dass, S., see Chaudhary, Y.S. 225 (2004) 291
Dauvergne, D., see Cohen, C. 225 (2004) 40
Della-Negra, S., see Bouneau, S. 225 (2004) 579
Denby, P.M., see Poolton, N.R.J. 225 (2004) 590
Depauw, J., see Bouneau, S. 225 (2004) 579
Dey, R. and A.C. Roy, Projectile angular distribution in the single ionization of He by proton impact . . . 225 (2004) 207
Dias, J.F., see Braga, C.F. 225 (2004) 561
Djourelov, N., T. Suzuki, Y. Ito, K. Velitchkova and K. Kondo, Variable-energy positron annihilation lifetime and Doppler broadening of the annihilation line study of carbon-implanted polyethylene 225 (2004) 357
Dogra, A., R. Kumar, S.A. Khan, V.V. Siva Kumar, N. Kumar and M. Singh, Influence of 190 MeV Ag ion irradiation on structural and magnetic properties and oxygen content of $NiMn_{0.05}Ti_xMg_xFe_{1.95-2x}O_4$ ($x = 0.0, 0.2$) ferrite thin film 225 (2004) 283
Dong, C., see Qin, Y. 225 (2004) 544
D'Orléans, C., J.P. Stoquert, C. Estournès, J.J. Grob, D. Muller, C. Cerruti and F. Haas, Deformation yield of Co nanoparticles in SiO_2 irradiated with 200 MeV ^{127}I ions 225 (2004) 154
Drabik, M., see Dworecki, K. 225 (2004) 483
Dubois, M., see Jardin, P. 225 (2004) 374
Dunn, K., see Stolterfoht, N. 225 (2004) 169
Dupuis, M., see Jardin, P. 225 (2004) 374
Durantel, F., see Jardin, P. 225 (2004) 374
Duvenbeck, A., F. Sroubek, Z. Sroubek and A. Wucher, Computer simulation of low-energy electronic excitations in atomic collision cascades 225 (2004) 464
Dvořánková, B., see Ročková-Hlaváčková, K. 225 (2004) 275
Dworecki, K., M. Drabik, T. Hasegawa and S. Waşik, Modification of polymer membranes by ion implantation 225 (2004) 483

El-Sayed, S.M., Electron beam and gamma irradiation effects on amorphous chalcogenide $SbSe_{2.5}$ films . . 225 (2004) 535
Enculescu, I., see Bercu, B. 225 (2004) 497
Ernst, R., see Speidel, K.-H. 225 (2004) 604
Estournès, C., see D'Orléans, C. 225 (2004) 154

Farabolini, W., see Jardin, P. 225 (2004) 374
Farenzena, L.S., see Jalowy, T. 225 (2004) 78

Fink, D., see Stolterfoht, N. 225 (2004) 169
Flambard, J.-L., see Jardin, P. 225 (2004) 374
Freund, J.B., see Moore, M.C. 225 (2004) 241
Fung, S., see Weng, H.M. 225 (2004) 397

García, G., see Pascual-Izarra, C. 225 (2004) 383
Gaubert, G., see Jardin, P. 225 (2004) 374
Gavarini, S., P. Trocellier and G. Matzen, Characterization of the alteration products formed at the surface of LaYSiAlO and CeYSiAlO glasses using ERDA and RBS techniques 225 (2004) 364
Gemein, N., see Speidel, K.-H. 225 (2004) 604
Gerber, J., see Speidel, K.-H. 225 (2004) 604
Ghosh, S., A. Gupta, P. Ayyub, N. Kumar, S.A. Khan, D. Banerjee and R. Bhattacharya, Swift heavy ion irradiation induced damage creation in nanocrystalline Li–Mg ferrite thin films 225 (2004) 310
Goains, C., see Ariyasinghe, W.M. 225 (2004) 191
Grande, P., see Czerski, K. 225 (2004) 72
Grande, P.L., see Schiwietz, G. 225 (2004) 4
Grob, J.J., see D'Orléans, C. 225 (2004) 154
Groeneveld, K.O., see Jalowy, T. 225 (2004) 78
Guan, Q., see Qin, Y. 225 (2004) 544
Gupta, A., see Ghosh, S. 225 (2004) 310
Güven, O., see Karadağ, E. 225 (2004) 489
Gwilliam, R., see Bolorizadeh, M.A. 225 (2004) 345

Haas, F., see D'Orléans, C. 225 (2004) 154
Hamilton, B., see Poolton, N.R.J. 225 (2004) 590
Han, R.D., see Kong, W. 225 (2004) 623
Hao, S., see Qin, Y. 225 (2004) 544
Hasegawa, T., see Dworecki, K. 225 (2004) 483
Hassan, G.M., see Sharaf, M.A. 225 (2004) 521
Hattass, M., see Jalowy, T. 225 (2004) 78
Heitz, J., see Ročková-Hlaváčková, K. 225 (2004) 275
Hellhammer, R., see Stolterfoht, N. 225 (2004) 169
Heymann, D., see Huisman, M.C. 225 (2004) 339
Higueret, S., see Nachab, A. 225 (2004) 418
Hnatowicz, V., see Ročková-Hlaváčková, K. 225 (2004) 275
Hoffmann, V., see Stolterfoht, N. 225 (2004) 169
Hohn, D., see Speidel, K.-H. 225 (2004) 604
Huet-Equilbec, C., see Jardin, P. 225 (2004) 374
Hui, I.P., see Weng, H.M. 225 (2004) 397
Huisman, M.C., A. Mrowiec, T.J. Ketel, D. Heymann, A.M. Vredenberg, J.F.J. van den Brand and R.D. Vis, Determination of the $^{13}C/^{12}C$ isotope ratio with ^{3}He induced nuclear reaction analysis 225 (2004) 339
Husson, D., see Nachab, A. 225 (2004) 418

Ito, Y., see Djourelov, N. 225 (2004) 357

Jacquet, D., see Bouneau, S. 225 (2004) 579
Jadan, M., A.R. Chelyadinskii and V.Yu. Yavid, Efficiency of formation of radiation defects in silicon upon implantation of silicon and phosphorus ions 225 (2004) 516
Jain, I.P., see Sisodia, V. 225 (2004) 256
Jalowy, T., L.S. Farenzena, M. Hattass, E.F. da Silveira, H. Schmidt-Böcking and K.O. Groeneveld, Analysis of the projectile track charging by H^+ secondary ion velocity distribution measurements 225 (2004) 78
Jardin, P., W. Farabolini, G. Gaubert, J.Y. Pacquet, J. Cornell, F. Durantel, C. Huet-Equilbec, N. Lecesne, R. Leroy, M.G. Saint Laurent, C. Barué, C. Canet, M. Dubois, M. Dupuis, J.-L. Flambard, P. Lehérissier, F. Lemagnen, O. Tuske and A.C.C. Villari, Atom-to-ion transformation time in singly charged ECRISs 225 (2004) 374

Jeong, S.-H., see Kim, J.-K. . . . 225 (2004) 509
Johnson, H.T., see Moore, M.C. . . . 225 (2004) 241

Kabiraj, D., see Sisodia, V. . . . 225 (2004) 256
Kalyanasundaram, N., see Moore, M.C. . . . 225 (2004) 241
Kamarou, A., see Wesch, W. . . . 225 (2004) 111
Kamarou, A., W. Wesch, E. Wendler and S. Klaumünzer, Damage formation and annealing in InP due to swift heavy ions . . . 225 (2004) 129
Karadağ, E., D. Saraydin and O. Güven, Water absorbency studies of γ-radiation crosslinked poly(acrylamide-co-2,3-dihydroxybutanedioic acid) hydrogels . . . 225 (2004) 489
Karolewski, M.A., Classical dynamics simulation of the fluence dependence of sputtering properties for the 2 keV Cu → Cu(1 0 0) system . . . 225 (2004) 217
Kenn, O., see Speidel, K.-H. . . . 225 (2004) 604
Ketel, T.J., see Huisman, M.C. . . . 225 (2004) 339
Khan, R.F.H., Aslam, W.J. Rink and D.R. Boreham, Electron paramagnetic resonance dose response studies for neutron irradiated human teeth . . . 225 (2004) 528
Khan, S.A., see Dogra, A. . . . 225 (2004) 283
Khan, S.A., see Chaudhary, Y.S. . . . 225 (2004) 291
Khan, S.A., see Ghosh, S. . . . 225 (2004) 310
Kim, D.K., see Kim, Y.K. . . . 225 (2004) 392
Kim, H.K., see Kim, Y.K. . . . 225 (2004) 392
Kim, J.-K., J.S. Colligon and S.-H. Jeong, Mathematical modeling for the composition prediction of compound films grown by ion-assisted deposition technique and its application to TiN_x film . . . 225 (2004) 509
Kim, Y.K., H.K. Kim, G. Cho and D.K. Kim, Effect of yttria substitution on the light output of $(Gd,Y)_2O_3$:Eu ceramic scintillator . . . 225 (2004) 392
Kishimoto, N., see Takeda, Y. . . . 225 (2004) 261
Klaumünzer, S., see Kamarou, A. . . . 225 (2004) 129
Klaumünzer, S., Ion tracks in quartz and vitreous silica . . . 225 (2004) 136
Koivisto, H., see Suominen, P. . . . 225 (2004) 572
Kondo, K., see Djourelov, N. . . . 225 (2004) 357
Kong, W., C.Y. Xi, B.J. Ye, H.M. Weng, X.Y. Zhou and R.D. Han, A digital measurement system of 2-detector Doppler broadening . . . 225 (2004) 623
Kumar, N., see Dogra, A. . . . 225 (2004) 283
Kumar, N., see Ghosh, S. . . . 225 (2004) 310
Kumar, R., see Dogra, A. . . . 225 (2004) 283
Kuznetsov, A.R., see Abromeit, C. . . . 225 (2004) 97
Kwan, P.Y., see Weng, H.M. . . . 225 (2004) 397

Lambri, O.A., see Salvatierra, L.M. . . . 225 (2004) 297
Le Beyec, Y., see Bouneau, S. . . . 225 (2004) 579
Lecesne, N., see Jardin, P. . . . 225 (2004) 374
Lehérissier, P., see Jardin, P. . . . 225 (2004) 374
Lemagnen, F., see Jardin, P. . . . 225 (2004) 374
Leroy, R., see Jardin, P. . . . 225 (2004) 374
Leske, J., see Speidel, K.-H. . . . 225 (2004) 604
Ling, C.C., see Weng, H.M. . . . 225 (2004) 397
Liu, X., see Lu, Y. . . . 225 (2004) 555
Liu, Y., see Qin, Y. . . . 225 (2004) 544
Lu, F., see Wang, K.-M. . . . 225 (2004) 503
Lu, J., see Takeda, Y. . . . 225 (2004) 261
Lu, R., see Cai, X. . . . 225 (2004) 185
Lu, Y., X. Wu, L. Zhuge and X. Liu, Initial study on the compositional and phase change of BaO/C/Mo under high temperature . . . 225 (2004) 555

Ma, X., see Cai, X. . . . 225 (2004) 185
Mahnke, H.-E., see Andersen, H.H. . . . 225 (2004) 1

Mahnke, H.-E., EXAFS-analysis of phase formation and modification induced by swift heavy ions 225 (2004) 160
Maier-Komor, P., see Speidel, K.-H. 225 (2004) 604
Matteo, C.L., see Salvatierra, L.M. 225 (2004) 297
Matzen, G., see Gavarini, S. 225 (2004) 364
McCullough, R.W., see Stolterfoht, N. 225 (2004) 169
Medouni, A., see Damache, S. 225 (2004) 449
Mehta, D., see Singh, P. 225 (2004) 198
Mitchell, I.V., see Bolorizadeh, M.A. 225 (2004) 345
Miyoshi, T., see Sato, Y. 225 (2004) 439
Moore, M.C., N. Kalyanasundaram, J.B. Freund and H.T. Johnson, Structural and sputtering effects of medium energy ion bombardment of silicon 225 (2004) 241
Mouffron, J.P., see Bouneau, S. 225 (2004) 579
Mrowiec, A., see Huisman, M.C. 225 (2004) 339
Müller, B., see Thurner, P. 225 (2004) 599
Muller, D., see D'Orléans, C. 225 (2004) 154
Müller, G., see Speidel, K.-H. 225 (2004) 604
Murakami, T., see Sato, Y. 225 (2004) 439

Nachab, A., D. Husson, A. Nourreddine and S. Higueret, First measurement of ^{222}Rn activity with a CMOS active pixel sensor 225 (2004) 418
Nagadi, M.M., see Naqvi, A.A. 225 (2004) 331
Nakamura, T., see Poolton, N.R.J. 225 (2004) 590
Naqvi, A.A., M.M. Nagadi and O.S. Baghabra Al-Amoudi, Elemental analysis of concrete samples using an accelerator-based PGNAA setup 225 (2004) 331
Nasseri, M.M., Z. Yin, X. Wu and D.-M. Zhu, X-ray imaging using a single plastic scintillating fiber 225 (2004) 617
Nickel, J., Slit scattering in a microbeam set-up 225 (2004) 402
Noda, K., see Sato, Y. 225 (2004) 439
Nourreddine, A., see Nachab, A. 225 (2004) 418
Novikov, A., see Bouneau, S. 225 (2004) 579

Offer, M., see Speidel, K.-H. 225 (2004) 604
Okubo, N., see Takeda, Y. 225 (2004) 261
Ouichaoui, S., see Damache, S. 225 (2004) 449

Pacquet, J.Y., see Jardin, P. 225 (2004) 374
Palihawadana, P., see Ariyasinghe, W.M. 225 (2004) 191
Pantos, E., see Poolton, N.R.J. 225 (2004) 590
Pascual-Izarra, C. and G. García, An efficient method for stopping force determination 225 (2004) 383
Pautrat, M., see Bouneau, S. 225 (2004) 579
Pedregosa, J., see Stolterfoht, N. 225 (2004) 169
Pešić, Z.D., see Stolterfoht, N. 225 (2004) 169
Petrov, A., see Stolterfoht, N. 225 (2004) 169
Piliposian, G.T., see Appleby, P.G. 225 (2004) 423
Poolton, N.R.J., L. Bøtter-Jensen, P.M. Denby, T. Nakamura, B. Hamilton and E. Pantos, High-sensitivity instrumentation for spectrally-resolved optically detected X-ray absorption spectroscopy 225 (2004) 590
Powers, D., see Ariyasinghe, W.M. 225 (2004) 191
Prakash, S., see Chaudhary, Y.S. 225 (2004) 291
Puri, S., see Singh, P. 225 (2004) 198

Qin, Y., J. Zou, C. Dong, X. Wang, A. Wu, Y. Liu, S. Hao and Q. Guan, Temperature–stress fields and related phenomena induced by a high current pulsed electron beam 225 (2004) 544

Rautray, T.R., see Vijayan, V. 225 (2004) 353
Rink, W.J., see Khan, R.F.H. 225 (2004) 528

Ročková-Hlaváčková, K., V. Švorčík, L. Bačáková, B. Dvořánková, J. Heitz and V. Hnatowicz, Biocompatibility of ion beam-modified and RGD-grafted polyethylene . . . 225 (2004) 275
Roth, M., see Schiwietz, G. . . . 225 (2004) 4
Roth, M., see Czerski, K. . . . 225 (2004) 72
Rothard, H., Electron ejection by heavy particles as precursor of track formation in condensed matter . . . 225 (2004) 27
Roy, A.C., see Dey, R. . . . 225 (2004) 207
Ruffell, S., see Bolorizadeh, M.A. . . . 225 (2004) 345

Saint Laurent, M.G., see Jardin, P. . . . 225 (2004) 374
Salvatierra, L.M., O.A. Lambri, C.L. Matteo, P.A. Sorichetti, C.A. Celauro and R.E. Bolmaro, Growing of crystalline zones in EPDM irradiated with a low neutron flux . . . 225 (2004) 297
Saraydin, D., see Karadağ, E. . . . 225 (2004) 489
Sato, Y., T. Miyoshi, T. Murakami, K. Noda, V.P. Shevelko and H. Tawara, Penetration of 4.3 and 6.0 MeV/u highly charged, heavy ions through carbon foils . . . 225 (2004) 439
Satsangi, V.R., see Chaudhary, Y.S. . . . 225 (2004) 291
Schattat, B. and W. Bolse, Fast heavy ion induced interface mixing in thin-film systems . . . 225 (2004) 105
Schielke, S., see Speidel, K.-H. . . . 225 (2004) 604
Schiwietz, G., see Andersen, H.H. . . . 225 (2004) 1
Schiwietz, G., K. Czerski, M. Roth, F. Staufenbiel and P.L. Grande, Femtosecond dynamics – snapshots of the early ion-track evolution . . . 225 (2004) 4
Schiwietz, G., see Czerski, K. . . . 225 (2004) 72
Schmidt-Böcking, H., see Jalowy, T. . . . 225 (2004) 78
Selvi, S., see Celiktas, C. . . . 225 (2004) 628
Shah, M., see Stolterfoht, N. . . . 225 (2004) 169
Shahi, J.S., see Singh, P. . . . 225 (2004) 198
Shao, C., see Cai, X. . . . 225 (2004) 185
Sharaf, M.A. and G.M. Hassan, Radiation induced radical in barium sulphate for ESR dosimetry: a preliminary study . . . 225 (2004) 521
Shen, D.-Y., see Wang, K.-M. . . . 225 (2004) 503
Shevelko, V.P., see Sato, Y. . . . 225 (2004) 439
Shi, B.-R., see Wang, K.-M. . . . 225 (2004) 503
Shrivastav, R., see Chaudhary, Y.S. . . . 225 (2004) 291
Singh, H., see Singh, N. . . . 225 (2004) 305
Singh, K., see Singh, N. . . . 225 (2004) 305
Singh, K.J., see Singh, N. . . . 225 (2004) 305
Singh, L. and R. Singh, Swift heavy ion induced modifications in polypropylene . . . 225 (2004) 478
Singh, M., see Dogra, A. . . . 225 (2004) 283
Singh, N., see Singh, P. . . . 225 (2004) 198
Singh, N., K.J. Singh, K. Singh and H. Singh, Comparative study of lead borate and bismuth lead borate glass systems as gamma-radiation shielding materials . . . 225 (2004) 305
Singh, P., D. Mehta, N. Singh, S. Puri and J.S. Shahi, Measurements of Rayleigh, Compton and resonant Raman scattering cross-sections for 59.536 keV γ-rays . . . 225 (2004) 198
Singh, R., see Singh, L. . . . 225 (2004) 478
Sisodia, V., D. Kabiraj and I.P. Jain, Schottky barrier height measurement of swift heavy ion intermixed Ni–Silicide interface . . . 225 (2004) 256
Siva Kumar, V.V., see Dogra, A. . . . 225 (2004) 283
Sorichetti, P.A., see Salvatierra, L.M. . . . 225 (2004) 297
Speidel, K.-H., S. Schielke, O. Kenn, J. Leske, D. Hohn, G. Müller, R. Ernst, N. Gemein, M. Offer, J. Gerber, P. Maier-Komor and M. Toulemonde, Evidence for the ion-induced electronic spike on *fs* and *nm* scales from transient field measurements . . . 225 (2004) 604
Spohr, R., see Bercu, B. . . . 225 (2004) 497
Sroubek, F., see Duvenbeck, A. . . . 225 (2004) 464
Sroubek, Z., see Duvenbeck, A. . . . 225 (2004) 464
Staufenbiel, F., see Schiwietz, G. . . . 225 (2004) 4
Staufenbiel, F., see Czerski, K. . . . 225 (2004) 72

Stolterfoht, N., R. Hellhammer, Z.D. Pešić, V. Hoffmann, J. Bundesmann, A. Petrov, D. Fink, B. Sulik, M. Shah, K. Dunn, J. Pedregosa and R.W. McCullough, Time evolution of ion guiding through nanocapillaries in a PET polymer . . . 225 (2004) 169
Stoquert, J.P., see D'Orléans, C. . . . 225 (2004) 154
Sulik, B., see Stolterfoht, N. . . . 225 (2004) 169
Suominen, P., O. Tarvainen and H. Koivisto, 3D-simulation studies of the modified magnetic multipole structure for an electron cyclotron resonance ion source . . . 225 (2004) 572
Suzuki, T., see Djourelov, N. . . . 225 (2004) 357
Švorčík, V., see Ročková-Hlaváčková, K. . . . 225 (2004) 275

Takeda, Y., J. Lu, N. Okubo and N. Kishimoto, Nonlinear optical response of Ta nanoparticles embedded in insulators by 60 keV negative ion implantation . . . 225 (2004) 261
Tarvainen, O., see Suominen, P. . . . 225 (2004) 572
Tawara, H., see Sato, Y. . . . 225 (2004) 439
Teixeira, E.C., see Braga, C.F. . . . 225 (2004) 561
Thurner, P., F. Beckmann and B. Müller, An optimization procedure for spatial and density resolution in hard X-ray micro-computed tomography . . . 225 (2004) 599
Toulemonde, M., see Speidel, K.-H. . . . 225 (2004) 604
Toumert, I., see Damache, S. . . . 225 (2004) 449
Trocellier, P., see Gavarini, S. . . . 225 (2004) 364
Tuske, O., see Jardin, P. . . . 225 (2004) 374

van den Brand, J.F.J., see Huisman, M.C. . . . 225 (2004) 339
Velitchkova, K., see Djourelov, N. . . . 225 (2004) 357
Vijayan, V., T.R. Rautray and D.K. Basa, EDXRF study of Indian punch-marked silver coins . . . 225 (2004) 353
Villari, A.C.C., see Jardin, P. . . . 225 (2004) 374
Vis, R.D., see Huisman, M.C. . . . 225 (2004) 339
Vredenberg, A.M., see Huisman, M.C. . . . 225 (2004) 339

Wang, K.-M., B.-R. Shi, N. Cue, D.-Y. Shen, F. Chen, X.-L. Wang and F. Lu, Depth profiles of MeV heavy ions implanted into Si and lithium triborate . . . 225 (2004) 503
Wang, X., see Qin, Y. . . . 225 (2004) 544
Wang, X.-L., see Wang, K.-M. . . . 225 (2004) 503
Waşik, S., see Dworecki, K. . . . 225 (2004) 483
Weidinger, A., see Zollondz, J.-H. . . . 225 (2004) 178
Wendler, E., see Wesch, W. . . . 225 (2004) 111
Wendler, E., see Kamarou, A. . . . 225 (2004) 129
Weng, H.M., C.C. Ling, C.D. Beling, S. Fung, C.K. Cheung, P.Y. Kwan and I.P. Hui, Tungsten mesh as positron transmission moderator in a monoenergetic positron beam . . . 225 (2004) 397
Weng, H.M., see Kong, W. . . . 225 (2004) 623
Wesch, W., A. Kamarou and E. Wendler, Effect of high electronic energy deposition in semiconductors . . 225 (2004) 111
Wesch, W., see Kamarou, A. . . . 225 (2004) 129
Wijeratne, T., see Ariyasinghe, W.M. . . . 225 (2004) 191
Wu, A., see Qin, Y. . . . 225 (2004) 544
Wu, X., see Lu, Y. . . . 225 (2004) 555
Wu, X., see Nasseri, M.M. . . . 225 (2004) 617
Wucher, A., see Duvenbeck, A. . . . 225 (2004) 464

Xi, C.Y., see Kong, W. . . . 225 (2004) 623

Yang, W., see Cai, X. . . . 225 (2004) 185
Yavid, V.Yu., see Jadan, M. . . . 225 (2004) 516
Ye, B.J., see Kong, W. . . . 225 (2004) 623
Yin, Z., see Nasseri, M.M. . . . 225 (2004) 617

Yoneama, M.L., see Braga, C.F. 225 (2004) 561
Young, D.A., Molecular dynamics simulation of swift ion damage in lithium fluoride 225 (2004) 231
Yu, D., see Cai, X. 225 (2004) 185

Zhou, X.Y., see Kong, W. 225 (2004) 623
Zhu, D.-M., see Nasseri, M.M. 225 (2004) 617
Zhuge, L., see Lu, Y. 225 (2004) 555
Zollondz, J.-H. and A. Weidinger, Towards new applications of ion tracks 225 (2004) 178
Zou, J., see Qin, Y. 225 (2004) 544

Available online at www.sciencedirect.com
SCIENCE DIRECT®
ELSEVIER
Nuclear Instruments and Methods in Physics Research B 225 (2004) 640–642
NIM B
Beam Interactions with Materials & Atoms
www.elsevier.com/locate/nimb

Subject index

Basic Data for Materials Modification and Analysis

Binding energy enhancement in the isocharge sequence of ions in collisions with Ne, X. Cai, D. Yu, R. Lu, Z. Cao, W. Yang, C. Shao, X. Chen and X. Ma 225 (2004) 185
Total electron scattering cross sections of He, Ne and Ar at intermediate electron energies, W.M. Ariyasinghe, C. Goains, D. Powers, T. Wijeratne and P. Palihawadana 225 (2004) 191
Measurements of Rayleigh, Compton and resonant Raman scattering cross-sections for 59.536 keV γ-rays, P. Singh, D. Mehta, N. Singh, S. Puri and J.S. Shahi 225 (2004) 198
Projectile angular distribution in the single ionization of He by proton impact, R. Dey and A.C. Roy 225 (2004) 207
Penetration of 4.3 and 6.0 MeV/u highly charged, heavy ions through carbon foils, Y. Sato, T. Miyoshi, T. Murakami, K. Noda, V.P. Shevelko and H. Tawara 225 (2004) 439
Stopping of 236 keV – 3.019 MeV protons in mylar and polypropylene films, S. Damache, S. Ouichaoui, A. Belhout, A. Medouni and I. Toumert 225 (2004) 449

Atomic Collision in Solids

Classical dynamics simulation of the fluence dependence of sputtering properties for the 2 keV Cu → Cu(1 0 0) system, M.A. Karolewski 225 (2004) 217
Molecular dynamics simulation of swift ion damage in lithium fluoride, D.A. Young 225 (2004) 231
Structural and sputtering effects of medium energy ion bombardment of silicon, M.C. Moore, N. Kalyanasundaram, J.B. Freund and H.T. Johnson 225 (2004) 241
Computer simulation of low-energy electronic excitations in atomic collision cascades, A. Duvenbeck, F. Sroubek, Z. Sroubek and A. Wucher 225 (2004) 464

Ion and Laser Beam Modification of Materials

Schottky barrier height measurement of swift heavy ion intermixed Ni–Silicide interface, V. Sisodia, D. Kabiraj and I.P. Jain 225 (2004) 256
Nonlinear optical response of Ta nanoparticles embedded in insulators by 60 keV negative ion implantation, Y. Takeda, J. Lu, N. Okubo and N. Kishimoto 225 (2004) 261
Characterization of polyimide irradiated in silver solution with a pulsed electron beam, P.S. Alegaonkar and V.N. Bhoraskar 225 (2004) 267
Bio-compatibility of ion beam-modified and RGD-grafted polyethylene, K. Ročková-Hlaváčá, V. Švorčík, L. Bačáková, B. Dvořánková, J. Heitz and V. Hnatowicz 225 (2004) 275
Influence of 190 MeV Ag ion irradiation on structural and magnetic properties and oxygen content of $NiMn_{0.05}Ti_xMg_xFe_{1.95-2x}O_4$ ($x = 0.0, 0.2$) ferrite thin film, A. Dogra, R. Kumar, S.A. Khan, V.V. Siva Kumar, N. Kumar and M. Singh 225 (2004) 283
Swift heavy ion induced modifications in polypropylene, L. Singh and R. Singh 225 (2004) 478
Modification of polymer membranes by ion implantation, K. Dworecki, M. Drabik, T. Hasegawa and S. Waşik 225 (2004) 483
Water absorbency studies of γ-radiation crosslinked poly(acrylamide-co-2,3-dihydroxybutanedioic acid) hydrogels, E. Karadağ, D. Saraydin and O. Güven 225 (2004) 489
Copper tubes prepared by electroless deposition in ion track templates, B. Bercu, I. Enculescu and R. Spohr 225 (2004) 497
Depth profiles of MeV heavy ions implanted into Si and lithium triborate, K.-M. Wang, B.-R. Shi, N. Cue, D.-Y. Shen, F. Chen, X.-L. Wang and F. Lu 225 (2004) 503

doi:10.1016/S0168-583X(04)01006-7

Mathematical modeling for the composition prediction of compound films grown by ion-assisted deposition technique and its application to TiN_x film, J.-K. Kim, J.S. Colligon and S.-H. Jeong 225 (2004) 509

Effects of Radiation

Editorial, H.H. Andersen, G. Schiwietz and H.-E. Mahnke 225 (2004) 1
Femtosecond dynamics – snapshots of the early ion-track evolution, G. Schiwietz, K. Czerski, M. Roth, F. Staufenbiel and P.L. Grande 225 (2004) 4
Electron ejection by heavy particles as precursor of track formation in condensed matter, H. Rothard 225 (2004) 27
High energy ion channeling. Principles and typical applications, C. Cohen and D. Dauvergne 225 (2004) 40
Non-equilibrium emission of secondary ions from BeO films sputtered by swift gold ions, K. Czerski, G. Schiwietz, M. Roth, F. Staufenbiel, P. Grande and S.R. Bhattacharyya 225 (2004) 72
Analysis of the projectile track charging by H^+ secondary ion velocity distribution measurements, T. Jalowy, L.S. Farenzena, M. Hattass, E.F. da Silveira, H. Schmidt-Böcking and K.O. Groeneveld 225 (2004) 78
Investigations by X-ray diffraction of swift heavy ion induced effects in inorganic materials, A. Benyagoub 225 (2004) 88
Molecular dynamics simulation of a swift ion track in NiAl, C. Abromeit and A.R. Kuznetsov 225 (2004) 97
Fast heavy ion induced interface mixing in thin-film systems, B. Schattat and W. Bolse 225 (2004) 105
Effect of high electronic energy deposition in semiconductors, W. Wesch, A. Kamarou and E. Wendler 225 (2004) 111
Damage formation and annealing in InP due to swift heavy ions, A. Kamarou, W. Wesch, E. Wendler and S. Klaumünzer 225 (2004) 129
Ion tracks in quartz and vitreous silica, S. Klaumünzer 225 (2004) 136
Deformation yield of Co nanoparticles in SiO_2 irradiated with 200 MeV ^{127}I ions, C. D'Orléans, J.P. Stoquert, C. Estournès, J.J. Grob, D. Muller, C. Cerruti and F. Haas 225 (2004) 154
EXAFS-analysis of phase formation and modification induced by swift heavy ions, H.-E. Mahnke 225 (2004) 160
Time evolution of ion guiding through nanocapillaries in a PET polymer, N. Stolterfoht, R. Hellhammer, Z.D. Pešić, V. Hoffmann, J. Bundesmann, A. Petrov, D. Fink, B. Sulik, M. Shah, K. Dunn, J. Pedregosa and R.W. McCullough 225 (2004) 169
Towards new applications of ion tracks, J.-H. Zollondz and A. Weidinger 225 (2004) 178
A study on 170 MeV Au^{13+} irradiation induced modifications in structural and photoelectrochemical behavior of nanostructured CuO thin films, Y.S. Chaudhary, S.A. Khan, R. Shrivastav, V.R. Satsangi, S. Prakash, D.K. Avasthi and S. Dass 225 (2004) 291
Growing of crystalline zones in EPDM irradiated with a low neutron flux, L.M. Salvatierra, O.A. Lambri, C.L. Matteo, P.A. Sorichetti, C.A. Celauro and R.E. Bolmaro 225 (2004) 297
Comparative study of lead borate and bismuth lead borate glass systems as gamma-radiation shielding materials, N. Singh, K.J. Singh, K. Singh and H. Singh 225 (2004) 305
Swift heavy ion irradiation induced damage creation in nanocrystalline Li–Mg ferrite thin films, S. Ghosh, A. Gupta, P. Ayyub, N. Kumar, S.A. Khan, D. Banerjee and R. Bhattacharya 225 (2004) 310
Efficiency of formation of radiation defects in silicon upon implantation of silicon and phosphorus ions, M. Jadan, A.R. Chelyadinskii and V.Yu. Yavid 225 (2004) 516
Radiation induced radical in barium sulphate for ESR dosimetry: a preliminary study, M.A. Sharaf and G.M. Hassan 225 (2004) 521
Electron paramagnetic resonance dose response studies for neutron irradiated human teeth, R.F.H. Khan, Aslam, W.J. Rink and D.R. Boreham 225 (2004) 528
Electron beam and gamma irradiation effects on amorphous chalcogenide $SbSe_{2.5}$ films, S.M. El-Sayed 225 (2004) 535
Temperature–stress fields and related phenomena induced by a high current pulsed electron beam, Y. Qin, J. Zou, C. Dong, X. Wang, A. Wu, Y. Liu, S. Hao and Q. Guan 225 (2004) 544

Analysis of Materials

Double scattering in grazing angle Rutherford backscattering spectra, N.P. Barradas 225 (2004) 318
Elemental analysis of concrete samples using an accelerator-based PGNAA setup, A.A. Naqvi, M.M. Nagadi and O.S. Baghabra Al-Amoudi 225 (2004) 331
Determination of the $^{13}C/^{12}C$ isotope ratio with ^3He induced nuclear reaction analysis, M.C. Huisman, A. Mrowiec, T.J. Ketel, D. Heymann, A.M. Vredenberg, J.F.J. van den Brand and R.D. Vis 225 (2004) 339
Quantitative depth profiling of ultra-shallow phosphorus implants in silicon using time-of-flight secondary ion mass spectrometry and the nuclear reaction $^{31}P(\alpha,p_0)^{34}S$, M.A. Bolorizadeh, S. Ruffell, I.V. Mitchell and R. Gwilliam 225 (2004) 345

EDXRF study of Indian punch-marked silver coins, V. Vijayan, T.R. Rautray and D.K. Basa 225 (2004) 353
Variable-energy positron annihilation lifetime and Doppler broadening of the annihilation line study of carbon-implanted polyethylene, N. Djourelov, T. Suzuki, Y. Ito, K. Velitchkova and K. Kondo 225 (2004) 357
Characterization of the alteration products formed at the surface of LaYSiAlO and CeYSiAlO glasses using ERDA and RBS techniques, S. Gavarini, P. Trocellier and G. Matzen 225 (2004) 364
Initial study on the compositional and phase change of BaO/C/Mo under high temperature, Y. Lu, X. Wu, L. Zhuge and X. Liu 225 (2004) 555
Study of the elemental composition of aerosols in the Candiota region of Brazil using the PIXE technique, C.F. Braga, E.C. Teixeira, M.L. Yoneama and J.F. Dias 225 (2004) 561

Ion Sources, Beam Optics and Accelerator Systems

Atom-to-ion transformation time in singly charged ECRISs, P. Jardin, W. Farabolini, G. Gaubert, J.Y. Pacquet, J. Cornell, F. Durantel, C. Huet-Equilbec, N. Lecesne, R. Leroy, M.G. Saint Laurent, C. Barué, C. Canet, M. Dubois, M. Dupuis, J.-L. Flambard, P. Lehérissier, F. Lemagnen, O. Tuske and A.C.C. Villari 225 (2004) 374
3D-simulation studies of the modified magnetic multipole structure for an electron cyclotron resonance ion source, P. Suominen, O. Tarvainen and H. Koivisto 225 (2004) 572
Heavy gold cluster beams production and identification, S. Bouneau, S. Della-Negra, J. Depauw, D. Jacquet, Y. Le Beyec, J.P. Mouffron, A. Novikov and M. Pautrat 225 (2004) 579

Experimental Methods and Equipment

An efficient method for stopping force determination, C. Pascual-Izarra and G. García 225 (2004) 383
Effect of yttria substitution on the light output of $(Gd,Y)_2O_3$:Eu ceramic scintillator, Y.K. Kim, H.K. Kim, G. Cho and D.K. Kim 225 (2004) 392
Tungsten mesh as positron transmission moderator in a monoenergetic positron beam, H.M. Weng, C.C. Ling, C.D. Beling, S. Fung, C.K. Cheung, P.Y. Kwan and I.P. Hui 225 (2004) 397
Slit scattering in a microbeam set-up, J. Nickel 225 (2004) 402
First measurement of ^{222}Rn activity with a CMOS active pixel sensor, A. Nachab, D. Husson, A. Nourreddine and S. Higueret 225 (2004) 418
Efficiency corrections for variable sample height in well-type germanium gamma detectors, P.G. Appleby and G.T. Piliposian 225 (2004) 423
High-sensitivity instrumentation for spectrally-resolved optically detected X-ray absorption spectroscopy, N.R.J. Poolton, L. Bøtter-Jensen, P.M. Denby, T. Nakamura, B. Hamilton and E. Pantos 225 (2004) 590
An optimization procedure for spatial and density resolution in hard X-ray micro-computed tomography, P. Thurner, F. Beckmann and B. Müller 225 (2004) 599
Evidence for the ion-induced electronic spike on *fs* and *nm* scales from transient field measurements, K.-H. Speidel, S. Schielke, O. Kenn, J. Leske, D. Hohn, G. Müller, R. Ernst, N. Gemein, M. Offer, J. Gerber, P. Maier-Komor and M. Toulemonde 225 (2004) 604
X-ray imaging using a single plastic scintillating fiber, M.M. Nasseri, Z. Yin, X. Wu and D.-M. Zhu 225 (2004) 617
A digital measurement system of 2-detector Doppler broadening, W. Kong, C.Y. Xi, B.J. Ye, H.M. Weng, X.Y. Zhou and R.D. Han 225 (2004) 623
Erratum to "Improvement of electron scattering and transmission spectra on ^{204}T1 isotope" [Nucl. Instr. and Meth. B 222 (1–2) (2004) 301–306], C. Celiktas and S. Selvi 225 (2004) 628

Errata

Erratum to "Improvement of electron scattering and transmission spectra on ^{204}T1 isotope" [Nucl. Instr. and Meth. B 222 (1–2) (2004) 301–306], C. Celiktas and S. Selvi 225 (2004) 628